

Claims

We Claim:

Sub B<sup>1</sup> 1. A method for treating intracellular infections within warm-blooded animals, comprising:

(a) administering to a warm-blooded animal a vector construct which directs the expression of at least one immunogenic portion of an antigen derived from an intracellular pathogen; and

(b) administering to said warm-blooded animal a protein which comprises said immunogenic portion of said antigen, such that an immune response is generated.

2. The method according to claim 1, further comprising the step of administering an immunomodulatory cofactor.

Sub B<sup>2</sup> 3. The method according to claim 1 wherein said protein is administered prior to administration of said vector construct.

4. The method according to claim 1 wherein said intracellular pathogen is a virus, and said antigen a viral antigen.

Sub B<sup>3</sup> 5. The method according to claim 3 wherein said viral antigen is obtained from a virus selected from the group consisting of hepatitis, feline immunodeficiency virus, and HIV.

6. The method according to claim 5 wherein said antigen is a hepatitis B antigen.

7. The method according to claim 6 wherein said hepatitis B antigen is selected from the group consisting of HBeAg, HBcAg and HBsAg.

8. The method according to claim 5 wherein said antigen is a hepatitis C antigen.

9. The method according to claim 8 wherein said hepatitis C antigen is selected from the group consisting of core antigen C, E1, E2/NS1, NS2, NS3, NS4 and NS5.

10. The method according to claim 1 wherein said intracellular pathogen is a parasite.

Sub B<sup>4</sup> 11. The method according to claim 1 wherein said vector construct is carried by a recombinant retrovirus.

12. The method according to claim 1 wherein said vector construct is carried by a recombinant virus selected from the group consisting of alphaviruses, adeno-associated virus and parvovirus.

13. The method according to claim 1 wherein said vector construct is a nucleic acid expression vector, or a eukaryotic layered vector initiation system.

14. A composition, comprising a vector construct which directs the expression of at least one immunogenic portion of an antigen derived from an intracellular pathogen, a protein which comprises said immunogenic portion of said antigen, and a pharmaceutically acceptable carrier or diluent.

15. The composition according to claim 14, further comprising an immunomodulatory cofactor.

16. The composition according to claim 14 wherein said intracellular pathogen is a virus, and said antigen a viral antigen.

Sub B<sup>5</sup> 17. ~~The composition according to claim 16 wherein said viral antigen is obtained from a virus selected from the group consisting of hepatitis, feline immunodeficiency virus, and HIV.~~

18. The composition according to claim 16 wherein said antigen is a hepatitis B antigen.

19. The composition according to claim 18 wherein said hepatitis B antigen is selected from the group consisting of HBeAg, HBcAg and HBsAg.

20. The composition according to claim 16 wherein said antigen is a hepatitis C antigen.

Sub B6 21. ~~The composition according to claim 20 wherein said hepatitis C antigen is selected from the group consisting of core antigen C, E1, E2/NS1, NS2, NS3, NS4 and NS5.~~

22. The composition according to claim 14 wherein said intracellular pathogen is a parasite.

Sub B7 23. ~~The composition according to claim 1 wherein said vector construct is carried by a recombinant retrovirus.~~

add B8